## 1. (amended) A disaccharide selected from the group consisting of:

wherein

X represents independently for each occurrence hydroxyl, acyloxy, silyloxy, halide, alkylthio, arylthio, 4-alkenyloxy, aryloxy, or -OC(NH)CCl<sub>3</sub>;

R represents independently for each occurrence H, alkyl, aryl, arylalkyl, heteroarylalkyl, silyl, acyl, alkenyloxycarbonyl, or aralkyloxycarbonyl; and

R' represents independently for each occurrence H, alkyl, aryl, arylalkyl, or heteroarylalkyl.

## 6. (amended) A trisaccharide represented by:

wherein

X represents independently for each occurrence hydroxyl, acyloxy, silyloxy, halide, alkylthio, arylthio, 4-alkenyloxy, aryloxy, or -OC(NH)CCl<sub>3</sub>;

R represents independently for each occurrence H, alkyl, aryl, arylalkyl, heteroarylalkyl, silyl, acyl, alkenyloxycarbonyl, or aralkyloxycarbonyl; and

R' represents independently for each occurrence H, alkyl, aryl, arylalkyl, or heteroarylalkyl.

## 11. (amended) A method of preparing a glycosaminoglycan, comprising the step of:

reacting a first mono-, di- or tri-saccharide, comprising an activated anomeric carbon, with a second mono-, di- or tri-saccharide, comprising a



hydroxyl or amino group, to form an oligosaccharide linked to a solid support, comprising a glycosidic linkage between said anomeric carbon of said first mono-, di- or tri-saccharide and said hydroxyl or amino group of said second mono-, di- or tri-saccharide; wherein the first mono-, di- or tri-saccharide or the second mono-, di- or tri-saccharide is covalently linked to a solid support.

15. (amended) The method of claim 11 or 12, further comprising the step of:

cleaving said covalent linkage between said oligosaccharide linked to a solid support and said solid support with an alkene metathesis catalyst and an alkene.

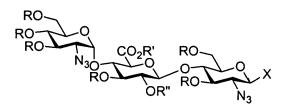
16. (amended) The method of claim 11 or 12, further comprising the step of:

sulfating a hydroxyl or amino moiety of said oligosaccharide linked to a solid support.

17. (amended) The method of claim 11 or 12, further comprising the step of:

removing a hydroxyl or amino protecting group from said oligosaccharide linked to a solid support by hydrogenolysis.

23. (new) A trisaccharide represented by:



wherein

X represents independently for each occurrence hydroxyl, silyloxy, halide, alkylthio, arylthio, alkoxy, aryloxy, or -OC(NH)CCl<sub>3</sub>;

R represents independently for each occurrence H, alkyl, aryl, arylalkyl, heteroarylalkyl, silyl, acyl, alkenyloxycarbonyl, or aralkyloxycarbonyl;

R' represents independently for each occurrence H, alkyl, aryl, arylalkyl, or heteroarylalkyl; and



R" represents independently for each occurrence H, alkyl, aryl, heteroarylalkyl, silyl, acyl, alkenyloxycarbonyl, or aralkyloxycarbonyl.

- 24. (new) The trisaccharide of claim 23, wherein X represents fluoro, bromo, 4-pentenyloxy or -OC(NH)CCl<sub>3</sub>.
- 25. (new) The trisaccharide of claim 23, wherein R' represents independently for each occurrence alkyl.
- 26. (new) The trisaccharide of claim 23, wherein X represents fluoro, bromo, 4-pentenyloxy or -OC(NH)CCl<sub>3</sub>; and R' represents independently for each occurrence alkyl.